

**Claims**

1. Method for processing video data for display on a display device having a plurality of luminous elements by  
5       applying a dithering function to at least part of said video data to refine the grey scale portrayal of video pictures of said video data,  
10       said method comprising the steps of :  
  
      - computing at least one motion vector from said video data, and  
15       - changing the phase, amplitude, spatial resolution and/or temporal resolution of said dithering function in accordance with said at least one motion vector when applying the dithering function to said video data.  
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2. Method according to claim 1, wherein said dithering function includes two spatial dimensions and one temporal dimension.
- 25 3. Method according to claim 1, wherein said dithering function includes the application of a plurality of masks.
4. Method according to claim 1, wherein said applying of  
30       said dithering function is based on single luminous elements called cells of said display device.
5. Method according to claim 1, wherein said dithering  
35       function is a 1-, 2-, 3- and/or 4- bit dithering function.

6. Method according to claim 1, wherein said at least one motion vector is defined for each pixel or cell individually.
- 5 7. Method according to claim 1, wherein said at least one motion vector has two spatial dimensions.
8. Device for processing video data for display on a display device having a plurality of luminous elements including  
10 including  
  
dithering means for applying a dithering function to at least a part of said video data to refine the grey scale portrayal of video pictures of said video data,  
15 wherein, it comprises :  
  
motion estimations means connected to said dithering means for computing at least one motion vector from said  
20 video data, wherein the phase, amplitude, spatial resolution and/or temporal resolution of said dithering function is changeable in accordance with said at least one motion vector.
- 25 9. Device according to claim 8, wherein said dithering function used by said dithering means includes two spatial dimensions and a temporal dimension.
10. Device according to claim 8, wherein said dithering  
30 function of said dithering means is based on a plurality of masks.
11. Device according to claim 8, wherein said dithering  
35 function of said dithering means is based on single luminous elements called cells of said display device.

12. Device according to claim 8, wherein said dithering means is able to process a 1-, 2-, 3- and/or 4-bit dithering function.
- 5 13. Device according to claim 8, wherein said at least one motion vector is definable for each pixel individually by said motion estimation means.
- 10 14. Device according to claim 8, wherein said at least one motion vector includes two spatial dimensions.
- 15 15. Device according to claim 8, further including gamma function means connected to said dithering means, so that the input signals of said dithering means are pre-corrected by a gamma function.
- 20 16. Device according to claim 8, further including controlling means connected to said dithering means for controlling said dithering means temporally in dependence of frames of said video data.